#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



# 

### (43) International Publication Date 10 March 2005 (10.03.2005)

## PCT

## (10) International Publication Number WO 2005/021316 A1

(51) International Patent Classification7:

B60L 11/18

(21) International Application Number:

PCT/JP2004/011804

(22) International Filing Date: 11 August 2004 (11.08.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003-304091

28 August 2003 (28.08.2003)

- (71) Applicant (for all designated States except US): NISSAN MOTOR CO., LTD. [JP/JP]; 2, Takara-cho, Kanagawa-ku, Yokohama-shi, Kanagawa 2210023 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FUSE, Toru [JP/JP]. MURAMOTO, Itsuro [JP/JP].
- (74) Agents: MIYOSHI, Hidekazu et al.; 9th Floor, Toranomon Daiichi Building, 2-3, Toranomon 1-chome, Minato-ku, Tokyo 1050001 (JP).

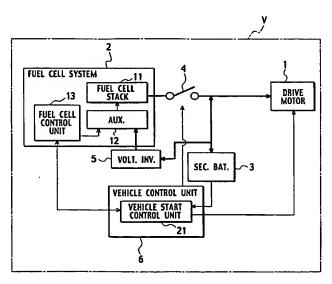
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTROL APPARATUS FOR VEHICLE HAVING FUEL CELL MOUNTED THEREON



(57) Abstract: A control apparatus (6) for a vehicle (V) which includes a fuel cell (11) for generating electricity, auxiliary equipment (12) of the fuel cell (11), a secondary battery (3) to be charged with electricity generated by the fuel cell (11), and a motor (1) to be fed with electricity from the fuel cell (11) and/or the secondary battery (3). The control apparatus (6) commences start-up of the fuel cell (11), supplying electricity from the secondary battery (3) to the auxiliary equipment (12), monitors status of the fuel cell (11), and as the status meets a predetermined condition, computes an electric power at which the secondary battery (3) discharges electricity, based on state of charge of the secondary battery (3) and remaining time to completion of the start-up of the fuel cell (11), and supplies electricity from the secondary battery (3) to the motor (1) at the computed electric power.

